HYDROBIOLOGICAL JOURNAL

Number 1 1996

Contents

A.V. Adrianov and V.V. Malakhov: Comparative Morphology of the Cephalorhyncha, Phylogeny, and Classification. 1. Structure, External Morphology, and Symmetry 1

Yu.S. Minichev and O.V. Bubko: Nervous System of *Harmothoë imbricata* (Polychaeta) Trochophore (on the Question of the Presence in Trochophore Larvae of an Orthogon) 18

V.D. Romanenko and N.Yu. Yevtushenko: International Cooperation in Protecting the Waters of the Dnieper Basin 28

G.V. Parchuk and P.D. Klochenko: Comparative Characterization of the Zooplankton of the Lower South Bug River Basin 33

A.A. Koval'chuk and Yu.V. Svintsova: Structure and Function of Cryophilous Cilioplankton—Dynamics of Species Composition, Abundance, and Biomass 50

M.A. Izmest'yeva, V.A. Ponomarenko, S.Ye. Zavalko, and E.A. Chepurnova: Effect of Specific Characteristics of Hard Substrate Surfaces on Abundance and Dynamics of Microbial Populations 58

A.I. Sakevich, P.D. Klochenko, S.M. Despal'kom, and T.F. Shevchenko: Effect of Carboammonium Salts on the Development of Planktonic Algae 68

V.I. Lushchak: Role of Phosphorylation and the Redistribution of Glycolytic Enzymes in the Adaptation of Hydrobionts to Environmental Conditions 80

V.D. Solomatina, M.V. Malinovskaya, and T.G. Grebenkina: Biochemical Changes in *Dreissena* Affected by Radionuclides 89

I.V. Emeretli: Temperature Dependence of Succinate Dehydrogenase Activity in Mitochondria of Black Sea Fishes 95

Ye.P. Buravlev, P.Ye. Strizhak, N.N. Smirnova, and L.A. Sirenko: Comparative Assessment of Biological and Chemical Tests for the Presence of Heavy Metal Ions and Radionuclides 102

I.A. Balakhnin, O.N. Davydov, and L.Ya. Kurovskaya: Effect of Catholyte on Abundance of Ectoparasites of Carp 109

HYDROBIOLOGICAL JOURNAL

Number 2 1996

Contents

I.V. Pan'kov: Use of a "Storage Coefficient" in Quantitative Assessment of Migration of Radionuclides Bound in Aquatic Organisms 1

A.D. Andreyev and N.Yu. Yevtushenko: Cluster Analysis of Spatial Distribution of the Components of the Biota of the Bays of the Northwest Black Sea 9

A.A. Stepanenko: The Aral Sea Hydrobiological Paradox 19

V.I. Ermolayev and L.S. Prusevich: The Ratio of Phytoplankton to Zooplankton in Mesotrophic Lakes 29

G.V. Parchuk: Zooplankton and Zoosirton in the Tisza River and Its Tributaries in the Ukraine 35

V.P. Semenchenko and Z.I. Gorelysheva: Reproductive Rates in Populations of *Diaphanosoma brachyurum* and *Bosmina crassicornis* as a Function of Their Food Source 49

A.A. Asochakov: Review of Studies on Amphipods (Crustacea, Amphipoda) in Peter the Great Gulf, Sea of Japan (1903–1991) 56

V.A. Chugaynova and S.P. Gorennikov: Mariculture of *Laminaria saccharina* in the White Sea 63

T.F. Shevchenko: Aquatic Life of Artesian Wells 68

A.Ya. Stolbov, Ye.N. Stavitskaya, and G.Ye. Shul'man: Oxygen Uptake and Nitrogen Excretion of Black Sea Fishes of Various Ecological Types under Hypoxia 79

Yu.N. Tokarev, E.P. Bityukov, and B.G. Sokolov: Microscale Structure of the Acoustic Field in the Upper Productive Layer of the Atlantic Ocean 87

L.N. Seravin: Structure of the White Sea Ctenophore, *Dryodora glandiformis* (Cydippida, Haeckeliidae) 97

V.V. Takhteyev: On the Ecology of a Rare Species of Amphipod, *Polyacanthisca calceolata* (Crustacea, Amphipoda) of Lake Baikal, with Reference to Parallelism in the Evolution of the Baikal and Oceanic Deepwater Faunas 107

HYDROBIOLOGICAL JOURNAL

Number 3 1996

Contents

V.G. Gagarin: On the Morphology and Taxonomy of the Genus *Fictor* (Nematoda, Diplogasterida) 1
A.G. Tarasov: Macrocrustaceans (Malacostraca) of the Ural River 18
O.A. Timoshkin, I.V. Mekhanikova, and V.V. Takhteyev: Investigation of the Lateral-Line Organs of Amphipods (Crustacea, Amphipoda). 1. Localization. Age-Related and Individual Variability of the Lateral-Line Organs of the Baikal Pelagic Amphipod, *Macrohectopus branickii* 31
I.V. Mekhanikova, V.V. Takhteyev, and O.A. Timoshkin: Investigation of the Lateral-Line Organs of Amphipods (Crustacea, Amphipoda). 2. Comparative Analysis of the Lateral-Line Organs in Different Amphipods 40
A.G. Rogozin: Turbellarians of Eastern Russia 54
L.L. Budnikova: Two New Species of Amphipods from the Family Pleustidae (Amphipoda, Gammaridea) from the West Sakhalin Shelf 61
V.F. Gnyubkin and P.G. Semen'kov: Orientation Inversion in Semiterrestrial Amphipods (Crustacea, Amphipoda, Talitridae) from the Black Sea and Their Responses to Changes in Salinity 77
I.V. Burkovskiy and A.P. Stolyarov: Features of the Structural Organization of the Macrobenthos in a Biotope with a Pronounced Salinity Gradient 87
I.Kh. Alekperov and A.A. Manafov: Techniques in Zoological Studies—Modified Impregnation Technique and Its Advantages 104

HYDROBIOLOGICAL JOURNAL

Number 4 1996

Contents

R.V. Babko: Infusorian Communities of a Polluted Small River 1
G.A. Galkovskaya: Population Interactions and Stability of Planktonic Communities 10
A.U. Gukov: Benthic Zoocenoses and Estimates of Ecological Conditions in the Lower Kolyma River 17
V.N. Jukinskii, L.I. Vyatchanina, and A.Ya. Shcherbukha: Characteristics of Ukrainian Ichthyofauna as a Basis for Environmental Assessment 24
L.A. Sirenko and V.A. Medved': Chemical and Biological Analysis of the Water Quality of Artesian Wells from Different Water-Bearing Horizons 50
T.F. Shevchenko: Blue-Green Algae in the Cooling Ponds of Thermal and Nuclear Power Stations 70
O.G. Zin'kovskiy, A.S. Potrokhov, and N.Yu. Yevtushenko: Effect of Copper and Manganese on Nuclease Activity of the Organs and Tissues of Common Carp Spawners during the Reproductive Period 83
V.V. Grubinko, A.S. Smol'skiy, I.N. Konovets, and O.M. Arsan: Hemoglobin of Fishes under the Action of Ammonia and Salts of Heavy Metals 92
L.I. Frantsevich, T.N. Zakharchuk, A.V. Kornyushin, S.N. Gorb, and V.V. Zolotov: Contamination of Land and Water in Kiev Oblast with Strontium-90 Based on Measurement of Radioactivity of Mollusk Shells 100

HYDROBIOLOGICAL JOURNAL

Vol. 32 **Numbers 5 & 6** **1996**

CONTENTS

1 Long-Term Effect of Tritiated Water on the Biological Indicators of Daphnia magna
D. I. Gudkov and L. S. Kipnis

11 Metabolic Characteristics of Carp Larvae Grown in Regulated Systems with Rotifers as Food
V. D. Romanenko, V. D. Solomatina, M. V. Milanovskaya, Yu. G. Krot, T. G. Grebenkina, and G. F. Nedyalkov

22 Leucocyte Formulas of Marine Fishes
L. V. Tochilina

30 Utilization of Protein and Lipids and Uptake of Oxygen by Spicara maena during Vigorous Swimming
V. Ya. Shchepkin, Yu. S. Belokopytin, G. S. Minyuk, and G. Ye. Shul'man

34 Changes in Survival-Rate Curves of Certain Crustaceans and Mollusks Exposed to Copper and Cadmium Ions
P. L. Kaspler and A. B. Malkin

44 Accumulation of Etafos and Its Principal Toxic Metabolite in Fish
A. I. Gantberg

51 Integrated Ecological Evaluation of the Effect of Chemical Pollution on Aquatic Ecosystems: Manganese Pollution
Ye. P. Buravlev, N. N. Smirnova, P. Ye. Strizhak, and L. A. Sirenko

58 Role of Periphyton in the Migration of Radionuclides in a Lake Ecosystem
T. A. Makarevich, A. P. Ostapenya, and A. P. Pavlyutin

65 Ecological Implications of the Hydrology of the Shatsk Lakes
V. M. Timchenko, A. Ye. Yaroshevich, Yu. L. Videnina, and S. M. Bezrodnaya

78 Concentration and Forms of Migration of Cadmium in the Dnieper Reservoirs
I. V. Iskra and P. N. Linnik

89 Effect of Fish on Ecosystem Structure and Functioning in a Shallow Lake
A. F. Alimov, V. V. Bul'on, and S. M. Golubkov

99 The Problem of Lake De-Eutrophication
G. V. Parchuk

114 A Population Explosion of Achnanlhes minutissima (Bacillariophyta) in the Phytoplankton of Lake Baikal
O. M. Kozhova and G. I. Kobanova

118 Macrozoobenthos of the Tisa River Basin in the Ukraine
A. V. Lyoshenko and A. A. Silayeva

121 Role of the pH and Redox Potential in Fish Embryogenesis
V. P. Bil'ko

132 Amines as Endometabolites and Exometabolites of Algae
P. D. Klochenko

HYDROBIOLOGICAL JOURNAL

Vol. 32 **Number 7** **1996**

CONTENTS

1 Buffering Capacity of River Ecosystems Subjected to Combined Radioactive and Chemical Pollution
L. P. Braginskiy, I. M. Velichko, A. I. Merezhko, and *A. P. Pasichnyy*

16 Sulfur-Containing Functional Groups of Soluble Proteins in the Desna and Dnieper Rivers below the Kiev Hydroelectric Station
Yu. D. Konovalov

25 Mnemiopsis mccradyi, a New Inhabitant of the Black Sea
A. V. Kovalev, V. Ye. Zaika, N. A. Ostrovskaya, N. G. Sergeyeva, V. V. Mel'nikov, I. Yu. Tamoykin, I. I. Ivanova, and *L. S. Svetlichnyy*

30 Expansion of the Range of the Nudibranch Doridella obscura in the Black Sea
I. A. Sinegub

33 Diet of the Freshwater Prawn Macrobrachium nipponense
N. Ye. Sal'nikov, and *G. G. E. Fernando*

38 Optimal Exploitation of a Fish Population
A. I. Abakumov, and *A. I. Kucher*

47 A Simulation Model of the Propagation of Radionuclides through the Dnieper Reservoirs
I. V. Rogal', and *V. A. Dobrynskiy*

57 A Method for Obtaining Aqueous Extracts from Bottom Sediments for Bioassays
E. P. Shcherban', O. M. Arsan, T. N. Shapoval, A. M. Tsvetkova, Yu. L. Pishcholka, and *I. G. Kuklya*

69 Potassium Metabolism of Fresh-Water Fish
V. D. Romanenko

76 Variations of Trace Element Concentrations in the Organs and Tissues of Cage-Reared Rainbow Trout
N. Yu. Yevtushenko

84 Effect of Lead on Nitrogen Metabolism of Carp as a Function of Water Temperature
I. N. Konovets, V. A. Kulik, O. M. Arsan, V. V. Grubinko, and *D. V. Gavriley*

92 Dioecious Reproduction in Achnanthes longipes (Bacillariophyta)
A. M. Roshchin

101 New Species of Commensal Peritrichs from the Genera Sincothurnia and Lagenophrys (Peritricha, Vaginicolidae, Lagenophryidae)
Ye. G. Boshko